

ABSTRACT

The present invention relates to a nozzle suitable for jetting high pressure and high temperature steam, and a method and an apparatus for producing an entangled nonwoven fabric using the nozzle. According to the apparatus, a steam inlet side main conduit (c1) and a steam outlet side conduit (c3) are connected with both end parts of a tubular nozzle holder (11) in a longitudinal direction provided integrally with nozzle members (15, 16, 23) having a plurality of nozzle holes (16a, 26). A steam outlet side conduit (c2) is provided with an opening/closing valve (55) and a trap conduit (57) is branched from a conduit at an upstream side from the opening/closing valve (55). By opening the opening/closing valve (55), a rapid temperature rise of the nozzle holder (11) can be enabled at a time of starting a production of a nonwoven fabric. Furthermore, even in the opening/closing valve (55) is closed in a regular operation, drainage generated inside the nozzle holder (11) can always be discharged to outside so that steam can be jetted stably and continuously, and thus a high quality entangled fiber nonwoven fabric can be produced continuously from the fiber web by the steam.